

NOMENCLATURAL NOTES ON NORTH AMERICAN
HYPOXIS (HYPOXIDACEAE)

ALAN HERNDON

ABSTRACT

The name *H. micrantha* Pollard is shown to be currently misapplied; plants going under that name in recent floristic treatments are referable to *H. wrightii* (Baker) Brackett while *H. micrantha* Pollard is properly regarded as a synonym of *H. hirsuta* (Linnaeus) Coville. *H. curtissii* Rose is shown to have priority over *H. leptocarpa* (Engelmann & Gray) Small. Lectotypes are selected for *H. rigida* Chapman and *H. sessilis* Linnaeus.

Key Words: *Hypoxis*, North America

INTRODUCTION

The following notes are intended to justify the application of certain names and other nomenclatural details in the updating of *Hypoxis* for the Flora of North America. This floristic treatment will appear prior to completion of a formal revision of the North American species.

Hypoxis micrantha Pollard in Small, Flora of the Southeastern United States: 287, 1392. 1903. TYPE: North Carolina, Carter Co., 19 July, *G. McCarty 8* (HOLOTYPE: US 245935!)

Two sheets at US bear notations in what appears to be Pollard's handwriting which identify them as types of *Hypoxis micrantha* Pollard. Only one of these sheets (*McCarty 8*) was cited in the original description and, accordingly, must be treated as the holotype. This sheet contains a few plants of what I consider to be depauperate *H. hirsuta*. The second sheet contains plants of three different species: *H. wrightii* (Baker) Brackett, *H. leptocarpa* (Engelmann & Gray) Small, and depauperate *H. hirsuta* (Linnaeus) Coville. Brackett chose an element representing *H. wrightii* as the exemplar for the name and based her concept of the species on this. Since this attribution is contrary to an existing holotype, it must be ignored. I find no taxonomically significant difference between *H. micrantha* Pollard and *H. hirsuta* (Linnaeus) Coville.

Hypoxis wrightii (Baker) Brackett, *Rhodora* 25: 140. 1923.

Hypoxis juncea var. *wrightii* Baker, J. Linn. Soc., Bot. 17: 106. 1878. TYPE: CUBA, 1865, C. Wright 239 (HOLOTYPE: K!)

Hypoxis wrightii is the correct name for the Atlantic Coastal Plain species called '*Hypoxis micrantha*' in recent floristic treatments. Current misuse of the name *Hypoxis micrantha* is due to Brackett's (1923) misunderstanding of the type outlined above. The species called '*Hypoxis micrantha*' in Brackett (1923) is presumably differentiated from *H. wrightii* (Baker) Brackett on the basis of seed coat color and sculpture, '*H. micrantha*' having a brown, finely muricate seed coat and *H. wrightii* having a black, coarsely muricate seed coat. There are discrepancies in her revision with regard to these characters. In the key, both '*H. micrantha*' and *H. wrightii* are treated under mature seed brown or drab (as opposed to black) although in the descriptions, *H. wrightii* is said to have a black seed. In both key and descriptions, the surface of mature '*H. micrantha*' seed is described as minutely muricate and the surface of mature *H. wrightii* seed is described as having rounded or truncated pebbling. Large differences in surface sculpture are also indicated in Brackett's illustrations of seed of '*H. micrantha*' and *H. wrightii*. However, no specimens from the West Indies have been seen with seed surface sculpture matching, or even suggesting, that shown in Brackett's Fig. 11. In all specimens examined to date, mature seeds from West Indian plants assigned to *H. wrightii* have had brown, finely muricate seed coats indistinguishable from the seed coats of plants of the Atlantic Coastal Plain. The final reported difference is in the persistence of a greater quantity of dead leaf bases on plants of *H. wrightii*. In this regard, the three plants on the type sheet of *H. wrightii* (Wright 239; a specimen not seen by Brackett) are indistinguishable from some specimens collected in the Atlantic Coastal Plain. My own observations suggest that the degree of persistence of dead leaf bases in this species is largely dependent on edaphic factors and is not suitable for taxonomic use.

Hypoxis curtissii Rose in Small, *Flora of the Southeastern United States*: 287, 1329. 1903. TYPE: Florida: Swamps near Jacksonville, 19 May 1894, A. H. Curtiss 4727 (HOLOTYPE: US 224588!; ISOTYPES: F!, MINN!, MO!, NY!)

- H. erecta* α *leptocarpa* Engelm. & Gray, Boston J. Nat. Hist. 5: 27. 1845. TYPE: Texas, F. Lindheimer 188 (HOLOTYPE: MO!; ISOTYPES: GH!, PH!)
- H. hirsuta* var. *leptocarpa* (Engelm. & Gray) Brackett, Rhodora 25: 127. 1923.
- H. leptocarpa* (Engelm. & Gray) Small, Manual of the Flora of the Southeastern United States:317. 1933.

It is likely that most botanists at the turn of the century assumed *Hypoxis leptocarpa* Engelm. was the valid name for this species since it appeared on widely distributed exsiccatae (*Curtiss 2837* and *Curtiss 4727*), but there is no evidence that the combination was validly published at the specific level prior to Small (1933). Gray, while noting the unpublished use of *leptocarpa* as a specific epithet by Engelm., explicitly rejected specific status for the taxon (Engelm. and Gray, 1845), and cannot be regarded as having published the combination. *Hypoxis curtissii* Rose in Small appears to be the earliest name at the specific level applicable to this species. *H. leptocarpa* (Engelm. & Gray) Small is here treated as a new combination based on *Hypoxis erecta* α *leptocarpa* Engelm. & Gray.

Hypoxis rigida Chapman, Flora Southern United States, reprint of ed. 2, Appendix 2: 696. 1892. TYPE: Florida: Apalachicola, Chapman s.n. (LECTOTYPE: US 968953!).

Chapman did not indicate any type specimens in his original description of *Hypoxis rigida*, but potential type specimens from his herbarium were seen at F, MO and US. None of these specimens could be associated unambiguously with the original description of the species. In fact, the original description contains references to characteristics, such as flower number, that suggest that more than a single specimen was used in drawing up the description. A lectotype (US 968953) is hereby chosen because the specimen, in addition to conforming with the original description as well as other possible types, has mature seed. The specimens examined have very meager collection data, and it is not possible to determine whether any particular specimens were collected together. Accordingly, no isotypes are recognized.

Hypoxis sessilis Linnaeus, Sp. Plantarum, ed. 2: 439. 1762.

No Linnaean specimens of *H. sessilis* are known. The specimen bearing that name in the Linnaean Herbarium (427.19) is a *Cur-*

culigo. Dr. C. F. Barrie (in lit) indicated that this specimen cannot be considered in typification because it evidently entered the herbarium after 1762. Both the fact that the label is in the hand of Linnaeus fil. and the notation Koenig [17]77 (Savage, 1945) indicate the late incorporation of this specimen. Linnaeus cited solely the illustration of *Ornithogali Virginici facie, Herba tuberosa Carolinensis* in Dillenius, Hortus Elthamensis (T. 220, F. 287) when he proposed the species, so, since no specimens corresponding to the Dillenian name have been found in the Dillenian herbarium (Druce and Vines, 1914), that illustration is here designated as the type. Unfortunately, neither the illustration nor the description in Dillenius are diagnostic although they strongly suggest the plant currently called *H. sessilis*. Similarly, the description in Linnaeus is suggestive rather than diagnostic. Like Brackett (1923), I feel that there is nothing to be gained by proposing a new name to replace *H. sessilis*. The Linnaean description and the Dillenian plate refer to a very characteristic feature of the plants currently called *H. sessilis*, namely the shortening of peduncle to a point where the flowers appear to be arising at ground level. This feature seems sufficient to justify the current application of the name even though its use is at variance with most herbarium specimens. Herbarium specimens are typically of plants with peduncles several cm long. In fact, long-peduncled inflorescences are produced relatively infrequently (Herndon, 1988) in natural populations of *H. sessilis*, but these plants are most often collected simply because they are much more visible to collectors than the plants with short peduncles (pers. observ.).

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DEPARTMENT OF BOTANY
LOUISIANA STATE UNIVERSITY
BATON ROUGE, LA 70803

or

FAIRCHILD TROPICAL GARDEN
11935 OLD CUTLER ROAD
MIAMI, FL 33156